

DRAINAGE PROPOSALS

Client: Phil Mullins
Site: Land South of New Smithy Avenue
Thurlstone
Planning Authority: Barnsley MBC

Introduction:

The landowner is proposing to develop a site currently occupied by green fields. Development proposals are for outline planning permission for 21 dwellings with associated estate roads and drainage infrastructure. The developed area of the site covers 0.95ha. This statement gives a brief summary for the drainage proposals for the proposed development.

Surface Water Drainage:

Surface water disposal is considered in accordance with the preferred drainage hierarchy in Building Regulations Part H 2002 and Planning Practice Guidance "Reducing the causes and impacts of flooding", paragraph 080, with disposal via SUDS methods the first option, followed by disposal to the watercourse and, finally disposal to the public sewer.

The site currently does not appear to be positively drained. It is assumed that surface water flows either over-ground or below-ground to the south east towards High Bank following the natural contours of the land.

An intrusive ground investigation has been carried out and confirms that infiltration SuDS such as soakaways are viable on the site due to the presence of shallow sandstone.

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Surface water discharge will be to soakaways. The Highway Drainage system will be offered for adoption by Barnsley Metropolitan Borough Council.

The final disposal strategy for surface water run-off requires detailed consideration and approval during the design phase of the project. Barnsley Metropolitan Borough Council will need to be consulted in respect of the proposals. The final design will need the approval of the relevant statutory bodies but will broadly follow these principles:-

- The principal disposal route is to soakaways. Soakaways will typically be designed for 1 in 100 year storm event.
- Soakaways serving adoptable highways would be offered for adoption by Barnsley MBC. Private plot soakaways would remain the responsibility of the plot owners.
- The type and size of SuDS used would be specified at detailed design but may consist of ring soakaways, cellular soakaways, permeable paving, trench soakaways or a combination of these.

Flood Routing:

It is normal planning requirements that flows from site be contained within the development boundary for rainfall events up to 1 in 100 years with an allowance for climate change. It is proposed that this shall be achieved by providing flood flow routes to the lower lying south-eastern boundary.

Road levels and cross falls shall be designed to allow overland flows to pass freely to these areas.

Plot levels adjacent low points shall be set higher than the surrounding areas to provide protection from any overland flows.

Foul Water Drainage:

Foul discharge is to the 150mm diameter public combined sewer to the south of the site in High Bank. A gravity connection can be achieved for the foul water outfall route with an existing easement agreement in place to serve the site.
